

HUMAN CAPITAL AND FINANCIAL PERFORMANCE OF MICRO, SMALL AND MEDIUM ENTERPRISES (MSMES): A CASE OF MSMES IN SOKOTO METROPOLIS

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ABSTRACT

Analyzing human knowledge, skills and intellectual abilities within the context of human capital, is not a recent phenomenon. Many empirical works have been conducted by classical and contemporary economists as well as other thinkers, for the purpose of unveiling the effectiveness of human qualities that can be termed as human capital. Among these works were those of Smith (1776), Say (1821), List (1928), Schultz (1961), Becker (1964), and more recently Erhuria (2007), Enyekit, (2011) and Dizgah, *et al* (2011). What is contemporary and contentious is the position and impact of human capital to the performance of firm, especially micro, small and medium scale firms.

One of the major lacunas in the Nigeria's industrial development process as observed by Udechukwu (2003) is the absence of a strong and virile Small and Medium Scale Enterprises. Udechukwu (2003) opines that the issue of managerial skills among MSMEs in Nigeria is one of the major problems facing MSMEs in Nigeria. According to Ahmed et al (2010, as cited in Fatoki, 2011), the critical resources for MSMEs financial development and survival are likely to be held by the individual entrepreneurs and are likely to be reflected in their skills, knowledge, experience and education.

KEYWORDS: Analyzing Human Knowledge, Skills and Intellectual Abilities

INTRODUCTION

However, despite the predominance of the micro, small and medium scale enterprises (MSMEs) in the world and their role in economic reconstruction and transformation, the available literature shows that there are scanty studies that investigate the determinants of MSMEs' financial performance especially in Nigeria. It has also been observed that most of the studies that relate human capital development with MSMEs performance are predominantly conducted in developed nations and mostly concentrated on large firms (Fatoki, 2011). This study for example, came across few studies that empirically examine the role of human capital development on MSMEs performance in Nigeria. Among these studies was one carried out in Awka, Anambra state, and the methodology employed in that study is inappropriate, because the study used OLS and ANOVA model to test hypothesis while the dependent variable is qualitative. Again, there was one conducted by Oforegbunam et al (2010) in Aba, Southeastern part of Nigeria, which was carried out without proper theoretical framework. Finally, previous studies have not been able to test the extent of the relationship between other variables apart from human capital and MSMEs financial performance.

For these reasons, this study attempted to empirically answer the following questions: (1) Does human capital have any significant influence on MSMEs financial performance in Sokoto state? (2) What other factors influence MSMEs' financial performance in Sokoto state?

LITERATURE REVIEW

Many studies have been conducted in order to ascertain the impact of human capital development on Micro, Small and Medium Enterprises' (MSMEs) financial performance. The findings of the studies are inconclusive, ranging from significant to insignificant relationships. For instance, Jonas et al., (2008), Magoutas & Papadogonas (2008), Auw (2009) found that there is significant and positive relationship between human capital development in form of educational qualification of the employees and labour productivity and performance of SMEs. Human capital development has been identified as the most prominent factor in determining the success and performance of SMEs (Sriyani, 2010). Entrepreneurial industrial experience is one of the components of human capital that is constantly associated with firms' financial performance. Literature is replete with evidences which suggest that MSMEs managers with previous experience in the industry perform fascinatingly better than those that lack prior experience in the industry. However, some studies have revealed insignificant relationships between human capital in form of training and MSMEs performance. For instance, Ukenna et al. (2010) using OLS regression model, their findings reveal that, although, the combine influence of the human capital proxies is .469, there is a significant negative correlation between training and SMEs financial performance.

Similarly, Earl et al (2004), using panel data technique, in a survey of 297 new small enterprises in Romania, found that, skills of an entrepreneur have little independent effect on SMEs growth. In the same vein, Mba & Cletus (2014), have found that lack of managerial skills as having strong and negative correlation with financial performance.

Although most of the previous empirical studies have argued that human capital development impacts positively on MSMEs financial performance, this does not in any way means, there are no other factors that can determine firm performance.

Using different concept and methodologies, researchers such as Ekpenyong & Nyong, (1992), Adebisi & Gbegi (2013) and Yusuff, *et al.* (2010) have pointed numerous factors (access to finance, business environment and gender) that correlate with firms' financial performance.

Many theories have been postulated in order to explain the relationship between human capital development and MSMEs financial performance. Among these theories, Resource Base View Theory of the firm (RBVT) and Human capital development appeared to be most frequently employed for the study that links human capital development with MSMEs financial performance (CEBR, 2007).

This study adopts the human capital development theory as a theoretical framework for this study. Human capital theory concerns with investment in the human resources of the firm in order to improve the general performance and well being of the members of the firm. The development of the human capital theory is largely due to the works of Schulz (1961) and Becker (1964).

METHODOLOGY

This study is a survey research. The population of this study consists of the entire 500 registered micro, small and medium enterprises operating in Sokoto state, as at the period of conducting this study. The study employed purposive sampling technique to select 150 MSMSEs within Sokoto metropolis.

Structured questionnaire was used in collecting primary data while inferential statistical tool has been employed for the purpose of analysing the data obtained for this study. Specifically, the Multiple Regression Model (MRM) in form of Robust Logistic regression model was employed.

To satisfy some of the important assumptions of classical linear regression model (CLRM), tests for multicollinearity and heteroscedasticity have been conducted.

The Model is specified as Follows

$$(Y_i) = \beta_0 + \beta_1 \text{EDU}_{1i} + \beta_2 \text{EDU}_{2i} + \beta_3 \text{EDU}_{3i} + \beta_6 \text{SKL}_{1i} + \beta_7 \text{SKL}_{2i} + \beta_8 \text{TRA}_i + \beta_9 \text{GEN}_i + \beta_{10} \text{BUS}_i + \beta_{11} \text{FIN}_i + \mu_i$$

Where:

Y = Financial performance of MSMEs dummy, taking the value of 1 if performance is satisfactory and 0 otherwise. This variable is the dependent variable.

The Independent Variables

EDU1= Education dummy 1, taking the value of 1 if the highest level of education is primary and 0 otherwise.

EDU2= Education dummy 2, taking the value of 1 if the highest level of education is secondary and 0 otherwise

EDU3= Education dummy 3, taking the value of 1 if the highest level of education is tertiary and 0 otherwise.

TRA= Training dummy variable, taking the value of 1 if the manager ever participated in any training and 0 otherwise.

SKL1= Skill dummy variable 1, taking the value of 1 if the competency of staff is good and 0 otherwise.

SKL2= Skill dummy variable 2, taking the value of 1 if there is cooperation between employees and management and 0 otherwise.

The Control Variables

GEN= Gender dummy control variable, taking the value of 1 if an entrepreneur is male and 0 otherwise.

BUS= Business environment dummy as a control variable, taking the value of 1 if tax administration is favorable and 0 otherwise.

FIN= Access to External Finance as a dummy variable, taking the value of 1 if an entrepreneur has access to external financing and 0 otherwise.

B_0 = the constant parameter or intercept.

β_1 = the coefficient of the EDU_1 .

β_2 = the coefficient of the EDU_2 .

β_3 = the coefficient of the EDU₃

β_6 = the coefficient of SKL₁.

β_7 = the coefficient of SKL₂.

β_8 = the coefficient of training.

β_9 = the coefficient of Gender.

β_{10} = the coefficient of the business environment.

β_{11} = the coefficient of access to finance

RESULTS

Robust Logistic Regression

The robust logistic regression was run to ascertain the relationships between human capital of MSMEs and their financial performance and the results are presented in Table 1.

Table 1: Robust Logistic Regression Results

Independent Variables	Dependent Variable MSMEs Financial Performance
Secondary Education	0.269 (-1.57)
Tertiary Education	0.790 (-2.66)***
Skills Dummy 1	0.940 (-0.07)
Skills Dummy2	4.316 (1.68)*
Training of Managers	2.769 (1.25)
Business Environment	3.395 (1.46)
Access to Finance	1.188 (0.16)
Gender of Manager	49.437 (3.86)***
Pseudo R ²	0.311
Wald Chi-square= F-Statistic	47.28***

Source: Field work, 2013, and Computation by the author using Stata version 12.1

Note 1: *** significance at 1%, ** significance at 5% and * significance at 10%

Note 2: Z-ratios are in parentheses

The results in Table 1 indicate that gender of the manager is positively significant at 1% level. The Z-statistic value of the gender variable stands at 3.86 which is higher than the critical value of 2.58 (3.86 > 2.58) with a P-value of 0.000. This implies that the gender of the manager is more likely to promote financial performance of MSMEs in the study area. The Skill Dummy 2 is also significant at 10% level, implying that the ability of a manager to ensure cooperation between the management and employees in an enterprise has the tendency of improving financial performance. However, tertiary education is negatively significant at 1% level as its Z-ratio is -2.66 with a P-value of 0.008. This has gone contrary

to the theoretical expectations of positive relationship between education and MSMEs' performance. But generally speaking the model is adequate as the F statistic value is significant even at 1% level.

The results compelled the study to reject the null hypothesis 2, which states that the gender of the entrepreneur does not have significant influence on MSMEs' financial performance and accept that there is positive and significant relationship between the gender of the manager and MSMEs' financial performance in the area. This suggests that a male manager is more likely to enhance financial performance of MSMEs than a female manager. The human capital on the other hand, does not have any significant influence on the financial performance of MSMEs as only Skills Dummy 2 out of the 5 proxies of human capital is positively and statistically significant, the other proxies are not statistically significant while the Tertiary education has a negative sign. The relationships between the two other proxies of business environment and access to finance were not significant as revealed by their respective P-values of 0.145 and 0.874 which are all greater than 0.10. This may be as a result of small size of the managers that acquired tertiary education (26.02%) and that of those having access to external finance (18.70%).

The Pseudo R^2 on the other hand, stands at 0.3113 indicating that the joint influence of all the independent variables in the model is 31.13%. This is not a problem since the Wald Chi-square indicates that the model is statistically adequate.

The Wald chi-square value which is equivalent to F-Statistic on the other hand reveals that the model is adequate as its P-value is significant at 1% level. This implies that the model is statistically adequate.

From the robust logistic regression analysis conducted, the following inferences could be drawn in connection to the hypotheses of this study. Results of the robust logistic regression indicated that only Skills Dummy 2 among the proxies of human capital has the tendency to statistically improve the performance of MSMEs. Other proxies of human capital have no any significant relationship with firms' performance. This study therefore, accepts the null hypothesis 1 that there is no any significant relationship between human capital and MSMEs financial performance.

Evidence from the robust logistic regression results in Table 1 also reveals that the gender of the manager is a major determinant of Micro, Small and Medium Scales Enterprises' financial performance. The gender dummy has a significant positive relationship with firms' financial performance at 1% significance level. The null hypothesis 2 is rejected and alternative hypothesis is accepted.

Hypothesis 3 seeks to determine whether there is any significant relationship between business environment and MSMEs financial performance. The logistic regression results indicate that the dummy variable of business environment is not statistically significant even at 10% level. The P-value of BUS is (0.145>0.10). We therefore accept the null hypothesis and reject alternative hypothesis of no significance relationship between business environments and MSMEs performance.

Although availability of external financing is expected to exert significance influence on the financial performance of MSMEs, the results in Table 1 indicate that the proxy for external financing (FIN) is not significantly different from zero at all levels of significance. Econometrically therefore, we have to accept the null hypothesis 4 and reject the alternative one.

Again, the findings of this study indicate that there is a weak relationship between human capital and Micro, Small, and Medium Scale Enterprises' financial performance. This is as a result of the fact that only Skills DUMMY2

among all the five proxies of human capital have turned to have a significant relationship with financial performance while the other three proxies (secondary education, tertiary education and skills DUMMY 1 have shown no significant relationship with MSMEs performance. Only one proxy (tertiary education) has shown a negative significance sign. The findings of this study are inconsistent with most of the findings of similar works reported in the literature. For instance, Ukenna et al (2010) found a positive relationship between human capital and firm performance. Furthermore, the empirical works of Batisti and Ganotakis (2005), Segal et al. (2008), Glover et al (1991) and that of Laezear (2003), are all at variance with the findings of this study. The findings are also not in conformity with the theoretical expectations of positive relationships between human capital development and MSMEs. These results might be as a result of the fact that there is a variation in terms of the effect of the various proxies of human capital among the selected firms. However, they are in conformity with those of Saleim and Ashour (2006) who found similar results using Pearson correlation coefficient and stepwise regression analysis in a survey of 38 Egyptian software companies.

The hypothesis two of this study was set to determine whether there is any relationship between gender of the manager and MSMEs financial performance. The findings show that a male manager is more likely to enhance MSMEs performance than a female manager. This corroborates the works of Yusuff *et al.* (2010) and Govil & Richard (2005).

Other control variables of Business Environment and Access to External Financing employed in the study have shown no significant relationships with MSMEs' financial performance. The null hypotheses that there are no significant relationships between both Business environment and access to finance and MSMEs' financial performance have been accepted. These findings imply that access to external financing and favorable business environment do not have significant impact on financial performance of MSMEs in the study area. However, several similar studies have shown divergent findings. The work of Kassami (2008), for instance, indicates that external financing is one of the most important factors in reducing the cost of doing business and improving performance of MSMEs. Lack of significant relationship may be as a result of the small proportion of the MSMEs that had access to external financing in the state.

CONCLUSIONS

On the basis of the findings of this study, the study concludes that not all the components of human capital enhances MSMEs financial performance as only Skill Dummy2 has shown significant relationship with MSMEs' performance. The other proxies of human capital in the study turned out to have no significant influence on their financial performance. In fact, one of the proxies has even outrageously shown an inverse relation with the performance of MSMEs. The study also concludes that male managers are more likely to perform much better than their female counterparts in managing MSMEs in Sokoto state. The study finally concludes that there are other factors apart from human capital that influence MSMEs' financial performance.

From the foregoing, the study recommends that since managerial skill has significant positive influence on MSMEs' performance, educational institutions should introduce and strengthen entrepreneurial education in the study area and in the country at large. Again, since only few of the MSMEs had access to external finance, government and other financial institutions in the area have to provide soft and interest free loan to MSMEs. The study recommends that special attention should be given to female entrepreneurs in terms of human capital development. Finally, considering the fact that this research work was limited to only subjective measures of financial performance of MSMEs, there is need for future research work to incorporate other quantitative financial measures of MSMEs' performance.

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